

Time -

Let m be the size of the first list and let n be the size of the second list

Then to initialize them each takes $O(m)$ and $O(n)$ time.

To merge both of them as we are traversing through both the lists once one after the other it would be $O(m+n)$

Then using bubble to sort the list - $O((m+n)^2)$ in the worst case.

Space -

For two lists it takes $O(m+n)$ space.